

What is claimed:

- 1 1. A system for delivery of on-line content, comprising:
 - 2 a server computer including a hierarchical database;
 - 3 the server computer is adapted to
 - 4 receive information for inclusion in the
 - 5 hierarchical database;
 - 6 search information contained in the hierarchical
 - 7 database at multiple levels in the hierarchical database;
 - 8 retrieve information contained in the
 - 9 hierarchical database identified as a result of a search;
 - 10 and
 - 11 build content from information received for
 - 12 inclusion in hierarchical database and from information
 - 13 retrieved from the hierarchical database.
- 1 2. The system of claim 1 wherein the hierarchical database
 - 2 includes objects, which represent units of information
 - 3 contained in the hierarchical database, and at least one
 - 4 larger unit of information, which represents a grouping of
 - 5 objects.
- 1 3. The system of claim 2 wherein the larger unit of
 - 2 information represents a concept.

- 1 4. The system of claim 2 wherein the larger unit of
2 information represents a topic.
- 1 5. The system of claim 2 wherein the larger unit of
2 information represents a course.
- 1 6. The system of claim 2 wherein the larger unit of
2 information represents a series.
- 1 7. The system of claim 2 wherein the information in the
2 hierarchical database can be searched at the object level.
- 1 8. The system of claim 3 wherein the information in the
2 hierarchical database can be searched at the concept level.
- 1 9. The system of claim 4 wherein the information in the
2 hierarchical database can be searched at the topic level.
- 1 10. The system of claim 5 wherein the information in the
2 hierarchical database can be searched at the course level.
- 1 11. The system of claim 6 wherein the information in the
2 hierarchical database can be searched at the series level.
- 1 12. The system of claim 7 wherein the information identified as
2 a result of the search can be previewed.

1 13. The system of claim 7 wherein the content is built from
2 information retrieved from the object level of the
3 hierarchical database.

1 14. The system of claim 8 wherein the content is built from
2 information retrieved from the concept level of the
3 hierarchical database.

1 15. The system of claim 9 wherein the content is built from
2 information retrieved from the topic level of the
3 hierarchical database.

1 16. The system of claim 10 wherein the content is built from
2 information retrieved from the course level of the
3 hierarchical database.

1 17. The system of claim 11 wherein the content is built from
2 information retrieved from the series level of the
3 hierarchical database.

1 18. The system of claim 2 wherein information contained in the
2 hierarchical database can be classified as part of an
3 object or larger unit of information.

1 19. The system of claim 2 wherein there are various types of
2 objects and the objects can be searched by type.

- 1 20. The system of claim 1 wherein the server computer is
2 adapted to facilitate the performance of administrative
3 functions.
- 1 21. The system of claim 20 wherein the administrative functions
2 include adding a new user.
- 1 22. The system of claim 20 wherein the administrative functions
2 include monitoring workflow.
- 1 23. The system of claim 1 wherein the system is used for the
2 delivery of on-line courses.
- 1 24. An apparatus, comprising:
2 a programmed computer, further comprising:
3 a memory having at least one region for storing
4 executable program code; and
5 a processor for executing the program code stored in
6 the memory, wherein the program code, further comprises:
7 code to receive information for inclusion in a
8 hierarchical database;
9 code to search information contained in the
10 hierarchical database at multiple levels in the
11 hierarchical database;
12 code to retrieve information contained in the

13 hierarchical database identified as a result of a search;
14 and

15 code to build content from information received
16 for inclusion in hierarchical database and from information
17 retrieved from the hierarchical database.

1 25. The apparatus of claim 24 wherein the hierarchical database
2 includes objects, which represent units of information
3 contained in the hierarchical database, and at least one
4 larger unit of information, which represents a grouping of
5 objects.

6 26. The apparatus of claim 25 wherein the larger unit of
7 information represents a concept.

8 27. The apparatus of claim 25 wherein the larger unit of
9 information represents a topic.

1 28. The apparatus of claim 25 wherein the larger unit of
2 information represents a course.

1 29. The apparatus of claim 25 wherein the larger unit of
2 information represents a series.

1 30. The apparatus of claim 25 further comprising code to search
2 the information in the hierarchical database at the object
3 level.

1 31. The apparatus of claim 26 further comprising code to search
2 the information in the hierarchical database at the concept
3 level.

1 32. The apparatus of claim 27 further comprising code to search
2 the information in the hierarchical database at the topic
level.

1 33. The apparatus of claim 28 further comprising code to search
2 the information in the hierarchical database at the course
level.

1 34. The apparatus of claim 29 further comprising code to search
2 the information in the hierarchical database at the series
level.

1 35. The apparatus of claim 30 further comprising code to
2 preview information identified as a result of the search.

1 36. The apparatus of claim 30 further comprising code to build
2 content from information retrieved from the object level of
3 the hierarchical database.

- 1 37. The apparatus of claim 31 further comprising code to build
2 content from information retrieved from the concept level
3 of the hierarchical database.
- 1 38. The apparatus of claim 32 further comprising code to build
2 content from information retrieved from the topic level of
3 the hierarchical database.
- 1 39. The apparatus of claim 33 further comprising code to build
2 content from information retrieved from the course level of
3 the hierarchical database.
40. The apparatus of claim 34 further comprising code to build
content from information retrieved from the series level of
the hierarchical database.
41. The apparatus of claim 25 further comprising code to
classify information contained in the hierarchical database
as part of an object or larger unit of information.
- 1 42. The apparatus of claim 25 further comprising code to
2 classify objects into various types and search the objects
3 by type.
- 1 43. The apparatus of claim 24 further comprising code to
2 facilitate the performance of administrative functions.

- 1 44. The apparatus of claim 43 wherein the administrative
2 functions include adding a new user.
- 1 45. The apparatus of claim 43 wherein the administrative
2 functions include monitoring workflow.
- 1 46. The apparatus of claim 24 wherein the apparatus is used for
2 the delivery of on-line courses.
- 1 47. A method for delivery of on-line content, comprising:
2 receiving information for storage in a server computer
3 as part of a hierarchical database;
4 storing the information received;
5 searching information contained in the hierarchical
6 database at multiple levels in the hierarchical database;
7 retrieving information contained in the hierarchical
8 database; and
9 building content from information received for
10 inclusion in hierarchical database and from information
11 retrieved from the hierarchical database.
- 1 48. The method of claim 47 wherein the hierarchical database
2 includes objects, which represent units of information
3 contained in the hierarchical database, and at least one

4 larger unit of information, which represents a grouping of
5 objects.

1 49. The method of claim 48 wherein the larger unit of
2 information represents a concept.

1 50. The method of claim 48 wherein the larger unit of
2 information represents a topic.

1 51. The method of claim 48 wherein the larger unit of
2 information represents a course.

1 52. The method of claim 48 wherein the larger unit of
2 information represents a series.

1 53. The method of claim 48 further comprising searching the
2 information in the hierarchical database at the object
3 level.

1 54. The method of claim 49 further comprising searching the
2 information in the hierarchical database at the concept
3 level.

1 55. The method of claim 50 further comprising searching the
2 information in the hierarchical database at the topic
3 level.

1 56. The method of claim 51 further comprising searching the
2 information in the hierarchical database at the course
3 level.

1 57. The method of claim 52 further comprising searching the
2 information in the hierarchical database at the series
3 level.

1 58. The method of claim 53 further comprising previewing the
2 information identified as a result of the search.

1 59. The method of claim 53 further comprising building content
2 from information retrieved from the object level of the
3 hierarchical database.

1 60. The method of claim 54 further comprising building content
2 from information retrieved from the concept level of the
3 hierarchical database.

1 61. The method of claim 55 further comprising building content
2 from information retrieved from the topic level of the
3 hierarchical database.

1 62. The method of claim 56 further comprising building content
2 from information retrieved from the course level of the
3 hierarchical database.

- 1 63. The method of claim 57 further comprising building content
2 from information retrieved from the series level of the
3 hierarchical database.
- 1 64. The method of claim 48 further comprising classifying
2 information contained in the hierarchical database as part
3 of an object or larger unit of information.
- 1 65. The method of claim 48 further comprising classifying
2 objects in various types and searching the objects by type.
66. The method of claim 47 further comprising performing
administrative functions.
67. The method of claim 66 wherein the administrative functions
include adding a new user.
68. The method of claim 66 wherein the administrative functions
include monitoring workflow.
- 1 69. The method of claim 47 wherein the method is used for the
2 delivery of on-line courses.
- 1 70. Computer executable software code stored on a computer
2 readable medium, the code for delivery of on-line content,
3 comprising:
4 code to receive information for inclusion in a

5 hierarchical database;

6 code to search information contained in the
7 hierarchical database at multiple levels in the
8 hierarchical database;

9 code to retrieve information contained in the
10 hierarchical database identified as a result of a search;
11 and

12 code to build content from information received for
13 inclusion in hierarchical database and from information
14 retrieved from the hierarchical database.

71. The code of claim 70 wherein the hierarchical database
includes objects, which represent units of information
contained in the hierarchical database, and at least one
larger unit of information, which represents a grouping of
objects.

72. The code of claim 71 wherein the larger unit of information
represents a concept.

73. The code of claim 71 wherein the larger unit of information
represents a topic.

74. The code of claim 71 wherein the larger unit of information
represents a course.

- 1 75. The code of claim 71 wherein the larger unit of information
2 represents a series.
- 1 76. The code of claim 71 wherein the information in the
2 hierarchical database can be searched at the object level.
- 1 77. The code of claim 72 wherein the information in the
2 hierarchical database can be searched at the concept level.
- 1 78. The code of claim 73 wherein the information in the
2 hierarchical database can be searched at the topic level.
79. The code of claim 74 wherein the information in the
hierarchical database can be searched at the course level.
80. The code of claim 75 wherein the information in the
hierarchical database can be searched at the series level.
81. The code of claim 76 further comprising code for previewing
2 information identified as a result of the search.
- 1 82. The code of claim 77 further comprising code for building
2 content from information retrieved from the object level of
3 the hierarchical database.

1 83. The code of claim 77 further comprising building content
2 from information retrieved from the concept level of the
3 hierarchical database.

1 84. The code of claim 78 further comprising building content
2 from information retrieved from the topic level of the
3 hierarchical database.

1 85. The code of claim 79 further comprising building content
2 from information retrieved from the course level of the
3 hierarchical database.

1 86. The code of claim 80 further comprising building content
2 from information retrieved from the series level of the
3 hierarchical database.

1 87. The code of claim 71 further comprising classifying
2 information contained in the hierarchical database as part
3 of an object or larger unit of information.

1 88. The code of claim 71 further comprising classifying objects
2 into various types of objects and searching the objects by
3 type.

1 89. The code of claim 70 further comprising performing
2 administrative functions.

1 90. The code of claim 89 wherein the administrative functions
2 include adding a new user.

1 91. The code of claim 89 wherein the administrative functions
2 include monitoring workflow.

1 92. The code of claim 70 wherein the code is used for the
2 delivery of on-line courses.

1 93. An apparatus for delivery of on-line content, comprising:

2 means for receiving information for storage in a
3 server computer as part of a hierarchical database;

4 means for storing the information received;

5 means for searching information contained in the
6 hierarchical database at multiple levels in the
7 hierarchical database;

8 means for retrieving information contained in the
9 hierarchical database; and

10 means for building content from information received
11 for inclusion in hierarchical database and from information
12 retrieved from the hierarchical database.

1 94. The apparatus of claim 93 wherein the hierarchical database
2 includes objects, which represent units of information
3 contained in the hierarchical database, and at least one

4 larger unit of information, which represents a grouping of
5 objects.

1 95. The apparatus of claim 94 wherein the larger unit of
2 information represents a concept.

1 96. The apparatus of claim 94 wherein the larger unit of
2 information represents a topic.

1 97. The apparatus of claim 94 wherein the larger unit of
2 information represents a course.

1 98. The apparatus of claim 94 wherein the larger unit of
2 information represents a series.

1 99. The apparatus of claim 94 further comprising means for
2 searching in the hierarchical database the information at
3 the object level.

1 100. The apparatus of claim 95 further comprising means for
2 searching the information in the hierarchical database at
3 the concept level.

1 101. The apparatus of claim 96 further comprising means for
2 searching the information in the hierarchical database at
3 the topic level.

1 102. The apparatus of claim 97 further comprising means for
2 searching the information in the hierarchical database at
3 the course level.

1 103. The apparatus of claim 98 further comprising means for
2 searching the information in the hierarchical database at
3 the series level.

1 104. The apparatus of claim 99 further comprising means for
2 previewing the information identified as a result of the
3 search.

1 105. The apparatus of claim 99 further comprising means for
2 building content from information retrieved from the object
3 level of the hierarchical database.

1 106. The apparatus of claim 100 further comprising means for
2 building content from information retrieved from the
3 concept level of the hierarchical database.

1 107. The apparatus of claim 101 further comprising means for
2 building content from information retrieved from the topic
3 level of the hierarchical database.

1 108. The apparatus of claim 102 further comprising means for
2 building content from information retrieved from the course
3 level of the hierarchical database.

1 109. The apparatus of claim 103 further comprising means for
2 building content from information retrieved from the series
3 level of the hierarchical database.

1 110. The apparatus of claim 94 further comprising means for
2 classifying information contained in the hierarchical
3 database as part of an object or larger unit of
4 information.

1 111. The apparatus of claim 94 further comprising means for
2 classifying objects in various types and searching the
3 objects by type.

1 112. The apparatus of claim 93 further comprising means for
2 performing administrative functions.

1 113. The apparatus of claim 112 wherein the administrative
2 functions include adding a new user.

1 114. The apparatus of claim 112 wherein the administrative
2 functions include monitoring workflow.

1 115. The apparatus of claim 93 wherein the apparatus is used for
2 the delivery of on-line courses.

115. The apparatus of claim 93 wherein the apparatus is used for
the delivery of on-line courses.